NEW ENGLAND FARMER.

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Farmer's and Gardener's Remembrancer.

[BY THE EDITOR.]

GATHERING AND SECURING POTATOES.

We must acknowledge that the topic of our present discourse is somewhat thread-bare, and not likely to be very fertile in entertaining matter. But, though we may state what many of our readers knew before, our observations may be new to some; and will, we hope, be thought interesting, because it may be for some people's interest to attend to them.

With regard to the time in which potatoes should be dug, we find some difference of opinion amongst practical farmers with whom we have conversed. It is acknowledged by all that they should not be taken from the ground till they are fully ripe. This may be known by the appearance of the tops, which will begin to decay as soon as the roots have arrived at maturity. After that period, we are told by some cultivators, it is important that the potatoes should be gathered and housed as soon as possible; but others say that they will keep as well or better in their native beds till frost comes, than in any other situation. Some say that the roots will actually increase in size as well as improve in quality, after the tops begin to decay, and therefore digging potatoes ought to be the last work, which the farmer performs in autumn before the ground freezes. And a writer in the American Farmer, vol. i, p. 154, says that potatoes should be dug as soon as ripe to *prevent a second growth.* But we do not think there is danger in our climate of potatoes growing twice in one season. We cannot say, however, which of the opinions relative to early or late digging is most correct, but till better instructed should feel disposed to gather potatoes as soon as convenient after the tops are decayed, either by ripeness or by frost. At least we should not put off the digging of them till very late in autumn lest cold weather should destroy or lock them in the ground till spring.

The most expeditious way of gathering a potatoe crop is, first to run furrows on each side of the rows, and then a deep one in the middle, which turns up most of the roots to the surface for the purpose of picking up by hand. In this way, however, we should apprehend some waste, and should not advise it except when potatoes were very plenty and labor scarce. A fork, with four prongs, with the addition of what may be called a fulcrum, fastened by a pivot to the back part of the handle may be used for raising potatoes without the aid of a plough. This is recommended by the Farmers' Assistant, but we believe that a hoe with prongs, (such as are sold at the Agricultural Ware House of Mr. J. R. Newell, No. 20, Merchant's Row, Boston) would be a still better implement for the purpose of gathering this crop.

The old fashioned mode of harvesting potatoes, (which is now very justly rejected by all enlightened husbandmen) was to dry them in the sun as much as you would grass, intended for hay. This was formerly and for ought we know to the contrary, is still the practice in Great Britain. Rees' Cyclopedia, (Art. Potatoe,) says "As soon as potatoes are gathered they should be allowed to remain *some days to dry, before they are stored.*" This is exactly wrong; and in our climate, an exposure of two or three days to a cloudless sun in September or October, would cause potatoes to turn green, strong, and become in some degree, poisonous. It is now said by practical farmers that the less the roots are exposed either to sun or air after being taken from the ground the better, and that it is well to permit some part of the soil in which they grow to adhere to and be mixed with them, when they are deposited in their winter quarters. It is recommended, however, not to dig and house potatoes *immediately* after a *soaking* rain, but to let them remain a few days in the hills, to get rid of their superfluous moisture, which, according to some rural philosophers, will in due time, be expelled by the principle of vegetation, or vital energies of the root, unless the ground is *very* wet.

In some parts of Great Britain the farmers are very careful to sort and separate their potatoes in the field, when they gather them, putting those which are small, diseased or cut with the hoe by themselves, to be used in autumn, or the fore part of the winter for the feeding of stock, &c. This is, no doubt, a very correct mode of procedure, and those who are not too much in a hurry to do their work well, will find an advantage in adopting it. Others assort their potatoes when they store them, by letting them run down an inclined plane of net work made of strong wire, with meshes which will permit the small potatoes only to pass through them.

There are various modes of securing potatoes for winter and spring use. Almost any method will answer by which you can keep them from water and frost. We will however describe or advert to some directions given by different writers relating to this subject, which may perhaps be of use to some, though they suggest nothing new to some others of our readers. Dr. Deane says "there is no difficulty in keeping potatoes through the winter in a cellar that is free from frost. Caves, dug in a dry soil, preserve them very well. They should be covered with two feet of earth over them. If they are in danger of *frost* in a cool cellar, they should be covered with a little salt hay [probably straw or fresh hay will answer.] In cellars they are more forward to sprout in the spring than in caves." In Lancashire and some parts of Scotland, it is a common practice to dig pits in the potatoe field, where the soil is light and dry, and putting in potatoes to the depth of three or four feet to lay a litter of dry straw over them, and then cover them up with earth so deep that no frosts can affect them. Mr. M'Mahon gives the following directions for preserving turnips, carrots, parsnips, &c. which we presume would answer as well for potatoes as for either of those roots. "*On the surface* of a very dry spot of ground, in a well sheltered situation, lay a stratum of sand two inches thick, and on this a layer of roots, covering them with a layer of sand, and so continue layer about of sand and roots till all are laid in, giving the whole, on every side a roof like slope; then cover this heap or ridge all over with about two inches of sand, over which lay a good coat of drawn straw up and down as if thatching a house, in order to carry off wet and prevent its entering to the roots; then dig a wide trench round the heap, and cover the straw with the earth so dug up, to a depth sufficient to preserve the roots effectually from the frost. An opening may be made on the south side of this heap, and completely covered with bundles of straw so as to have access to the roots at all times, when wanted either for sale or use.

"Some people lay straw, or hay, between the layers of roots, and immediately on the top of them; this I do not approve of, as the straw or hay will become damp and mouldy, and very often occasion the roots to rot, while the sand would preserve them sweet and sound." We think that this method of preserving such roots as would probably be wanted in the winter would be found preferable to putting them in caves, or pits, which it might be difficult to open and close after severe frost has commenced. They might, no doubt, be preserved in the manner pointed out by Jesse Buel, Esq. (in the first volume of this paper, page 106,) for securing ruta baga; but as they would be more liable to be injured by frost than that root, they would of course require a thicker coat of earth or other material for a covering.* Care should be taken not to lay them in too large masses lest they heat and spoil. If you have great quantities to preserve you may either make a proportionate number of pits or heaps, or place them in a trench or row, which may be longer or shorter as the case may require. They should have a light covering when first buried as they will sweat, and be apt to rot if placed in too warm a situation; and as winter approaches more earth may be placed over them, till they

* On reflection we believe it will not be amiss to give, in this place, Mr. Buel's directions on this subject, in order to accommodate such of our readers as may not be in possession of our first volume. "To preserve the roots dig about one foot deep on the side of a hill, leaving the bottom inclining, and sufficiently broad each way to be able to pile in the space, in the form of a cone [or sugar loaf,] 100 bushels. Place the roots in it, and bring the top to a point as far as practicable. Cover with straw and then dirt. They will bear considerable frost without injury; [potatoes are more liable to injury from frost.] Take care to dig a trench round the mound to turn off the water."

A writer with the signature "A Farmer," whose communication was published in our paper, vol. i, p. 354, gives the following mode of securing potatoes, which we believe very judicious, and republish for the reasons above mentioned. "When the potatoes are ripe in the fall, that is when the vines are dead, I dig them and put them into a pit, dug on a knoll with a trench two feet deep, leading from the pit out, in which I place a common pump log, with the end to the edge of the hole. After placing boards over the hole, cover the whole with a thickness of earth sufficient to prevent the frost from reaching them. In this way any quantity can be put together without any danger of their heating. Care should be taken to prevent the mice from getting to the hole thro' the log, by nailing a piece of tin with holes punched in it at the outer end."

are perfectly secure from the severest frost.—We have mentioned before that it was once thought necessary to expose potatoes to several days of sunshine before they were housed; an error which is now pretty generally exploded. But there is another practice which we believe is not correct, although it is, perhaps, often adhered to. Potatoes designed for the table are often packed away in sand, and may be very well preserved in that manner. It was formerly thought necessary that the sand in which they were placed should be *perfectly dry*. But we have been told by good practical farmers not only that potatoes should not be dried in the sun, when dug, but that they are best preserved in *moist* sand. Some say it is as well to dig, gather and house potatoes in rainy as in fair weather, much better to choose a cloudy, cool and damp than a clear, dry and warm day for that purpose, and even "wet sand" is most eligible to preserve them in. The Farmers' Assistant assures us that "A planter of North Carolina sent some potatoes to the West Indies for market; a part of which were dried in the sun, in the usual way, and a part were laid away in *moist or wet sand* as fast as they were dug; and when exposed for sale he obtained *three times the amount*, per bushel, for those laid in sand, that he got for the others. We mention this circumstance, in order to observe that such potatoes as are designed for the table should be laid away in *wet* sand as fast as they are taken from the earth." We perceive nothing unreasonable, or unphilosophical in the supposition that potatoes, as well as other roots, may require moisture to preserve their life, their vital, or vegetable principle. There is no danger of their growing, or sprouting, unless to moisture be added *warmth* and *air*. Seeds of plants, we are told by good authority, are best preserved "by causing them to be packed either in husks, pods, &c. in absorbent paper with raisins, or brown *moist* sugar." And if so, is it not probable that *moist* sand may answer for preserving roots, fruits, &c? The *degree* of moisture proper for sand intended for such uses, we can say nothing about, except we have preserved parsnips and carrots through the winter and spring till June, by packing them in sand, taken from a bank, and used immediately, without any attention to drying it. The sand was, we believe, a little *damp* but not very *wet*, and that is the state in which we should (as at present informed) recommend using it. It might be well, however, to try a few roots packed in sand fully or nearly saturated with water, and note the result of the experiment for the benefit of your future management of this important branch of household economy. Perhaps the *sweet potatoe* which many have attempted in vain to preserve in *dry sand*, might be well kept in *moist* sand; and if so the most serious obstacle to the cultivation of that important root in the northern part of the union will be removed.

FOR THE NEW ENGLAND FARMER.

CIDER.

Good cider is probably as pleasant and wholesome a drink as any that is or can be made use of. Yet a very large proportion of the cider that is made is both unpalatable and unfit to be used. We not unfrequently hear people complaining that their cider is bad, and wondering what the cause of it is. Some people might be informed that it is neither mysterious nor unaccountable why they do not have good cider.—If there be proper care and attention in making and managing cider, there is very little doubt but that it will be pleasant and good; while on the other hand, if suitable care and attention be wanting, it is as certain to be unpleasant and bad. There are a few things, the observance of which are necessary in order to have good cider. It does not depend altogether, nor principally, upon the kind of apples, for there are but few sorts but what will make good cider if rightly managed.

Apples should be thoroughly ripened, and gathered when perfectly dry and put into the cider house, where they should be kept until sufficiently mellow to be ground, which should be done before they become rotten and musty. Cider should always be made in cool weather, the wind blowing from the W. or N. W. If it be made when the wind blows from the South it is almost certain that it will be hard and unpleasant. Cider should not be pressed out of the pomace sooner than ten or twelve hours after the apples are ground, as the flavor will be better by thus remaining. After it is pressed out it should be strained through sand, which will take out all the sediment, and thereby prevent its working or fermenting too much. This operation is simple and easy, and attended with very little labor or expense. Sand of a coarse kind should be procured from a river or pond and put into a cistern suitable for the purpose, first placing a layer of straw at the bottom to prevent its washing through. Having thus prepared for straining, put in water sufficient to wet the sand and thoroughly rinse out all the dust or fine dirt, which will be done as soon as the water runs clear. The cider should now be put into the cistern as it runs from the press, and as fast as it runs through the sand put into suitable casks and placed in a tight cool cellar, and after the fermentation is over be bunged tight, and thus remain until wanted for use.

Neatness and cleanliness are essential and indispensably necessary in order to have good cider. The cider mill, and every thing connected with it, should at all times be kept perfectly sweet. Pomace should not be permitted to remain on the press after the cider has done running from it, as it will immediately become sour, should the weather be warm. Straw and litter of every kind should be kept entirely away, except what is necessary to be used.—The manure of the horse should be cleaned away as soon as it is dropped. In fact, the cider house, the mill, and every thing appertaining thereto, should be kept as free from dirt and filth of every kind even as the kitchen or parlor.

I know of one distinguished farmer who during the winter shelters his sheep and calves in his cider house. Another within my knowledge makes use of it as a slaughter house. He butchers his hogs therein, scalds them in his cider tub, and dresses them on the press. I have been at some cider mills where the straw and pomace, the horse droppings and other filth, rendered it almost impossible to stir about.

As long as habits of this description are persisted in, so long we must expect to hear people complaining about their cider.

A FARMER.

Worcester, Sept. 1823.

To the Editor of the New England Farmer,

Dear Sir—If the following Notes from Professor Day's Lectures, describing the best mode of constructing chimneys, can fill up a corner of your valuable paper with advantage, you are at liberty to make use of them.

CHIMNIES.

A common opinion concerning the ascent of smoke is, that it is *drawn up;* but the truth is the smoke is *pressed up* by the cold air which is coming to the fire place from the room. The warm air rises upon the principle of specific gravity and carries the smoke up with it. Smoke is not *lighter* than air of the same temperature, but it rises principally because it is in the current of heated air. Dr. Franklin by a very simple experiment with a tobacco pipe has demonstrated this fact to every ones satisfactions. The great art then of making the chimney carry smoke consists in producing this current; and removing as much as possible every obstruction to its passage. The funnel should be made as *smooth* as possible. It should be plaistered and kept clear as may be of *soot* and should be large enough to admit the whole of the heated air.

1. The funnel should be made as long as convenient. For the force of the current is proportioned to the difference between the weight of the air in the chimney and the weight of a column of the same height without it. This is the reason that rooms in the upper lofts are more liable to smoke than those in the lower, unless they be made proportionably smaller. An imperfect draught may often be remedied merely by raising the top of the chimney. A very common defect in the chimnies in this country is that the funnels are much too large, It requires a good fire to heat so considerable a body of air. To make the funnel bend is of no advantage to the draught, but rather impedes it. But it is of use to prevent the fall of rain and snow, and obstruct the progress of sudden puffs of wind. The turn should be gradual.

2. The fire place should be constructed in such a manner, that *all the air* which passes into the funnel should be heated as it passes by the fire. Count Rumford found only one case out of five hundred where the smoking of the chimney was owing to any other cause than this improper dimension of the throat and fire place. The throat need not be more than four inches in depth in almost all cases. The mantle piece is often too high. This construction has the advantage of throwing more heat into the room, and if there is no danger of smoke the higher the mantle piece, the better. The fire place must not be made very deep. Almost all smoking chimnies may probably be remedied by lowering the mantle peice. The fire place should never be wider than is sufficient to receive the wood. But supposing that the chimney is constructed in the best manner possible, it is not certain that it will carry the smoke well. One thing is farther necessary—the constant supply of fresh air from the room. Rooms in a new house are apt to be filled with smoke because they are too tight. Move the door back and forth until you find the least opening which will clear the room of smoke. Calculate the number of square inches in this;—and an opening in any part of the room may be made of the same extent.

From Coxe on Fruit Trees.

ON THE PLANTING AND CULTIVATION OF ORCHARDS.

The first thing to be determined upon in planting of an orchard, is the proper distance of the trees: if a mere fruit plantation be the object, the distance may be small—if the cultivation of grain and grass be in view, the space between the trees must be wider: at thirty feet apart, an acre will contain forty-eight trees; at thirty-five feet, thirty-five trees; at forty feet, twenty-seven trees; and at fifty feet, about eighteen to the acre—these are the usual distances. In my own plantations, I have adopted the various distances according to the depth and character of the soil; about two thirds of the ground, comprizing about one hundred acres, are planted at 50 feet; on the remaining fifty acres, I have tried 30, 35, and 40 feet; and as far as could be conveniently done, I have planted the trees of smallest growth on the lightest soil; taking every circumstance into consideration, it will probably be found, that forty feet is the most eligible distance for a farm orchard. It will admit sufficient sun and air, in our dry and warm climate; and until the trees shall be fully grown, will allow of a profitable application of the ground to the cultivation of grain and grasses.

Much trouble will be saved, and much accuracy in planting will be insured, by marking the sites of trees by stakes previous to digging the holes. In shallow soils, I would recommend making the holes of the depth of two spits of earth, scattering the lower spit at some distance; and supplying its place by an equal quantity of the neighboring surface earth—the depth of the hole must depend on that of the sub-soil.

An eligible mode, which I have practised with success in a large portion of my orchards, on the lighter soils, is to supply the place of the stratum of poor earth, by one or two loads of meadow mud, ditch banks, or good surface soil, laid round each tree after planting; ploughing the ground for a fallow crop the next spring, when the mud has become completely pulverized by the frost: the size of the hole should be sufficiently large to admit a spade handle, when laid horizontally in the bottom; affording ample space for the expansion of the roots in loose rich earth. Well digested compost is useful round newly planted trees, in stiff or cold soils—both lime, and fresh stable manure, I have found prejudicial in the dry and hot weather of summer; the latter substance is also frequently a cover for moles and field mice, which are extremely injurious in winter, to trees of even six or eight years old in light soils. I have found great benefit from the application of every kind of manure on the surface, and mixing it gradually by cultivation of the soil, as the best security against drought in summer, and vermin in the winter.

The proper season for planting, will be found to depend on a variety of circumstances—in light soils, the winter settles the earth round the roots, and best secures them against the drought of the following season—it is a time of leisure to the farmer, and affords an early selection of trees from the nursery. In stiff or wet soils, I should give a preference to spring planting, other circumstances being equal—I have planted at both seasons, and have generally found that care and attention ensured a correspondent success in the growth of my trees. In whatever season an orchard may be planted, too much attention cannot be given to extend the roots in every direction; to cut off all wounded parts, and more especially, not to plant too deep; this I believe is the common error of inexperienced planters: as a general rule, I would recommend that the tree be placed in the orchard with about three inches of earth over the upper tier of roots, which will make it about two inches deeper than it stood in the nursery; that the tree, after being partially covered, should be well shaken, to admit the finer particles of the earth among the fibrous roots, and that it be well settled, by treading the earth around it—with these precautions, I have never found the necessity of stakes. The tops of young trees should never be shortened, lest it should produce a growth of suckers: I would recommend in preference, that they be thinned, if found too heavy: if the trees have been long out of the ground and the roots have become shrivelled at the time of planting, the labor of pouring a pail full of water round each tree, will be amply repaid in the success it will ensure in their growth.

The looser the ground is kept for the first, and for several succeeding years, the more certain and more vigorous will be the growth of the orchard—in the luxuriance and color of the foliage of contiguous plantations, I have found every stage of cultivation strongly marked: those orchards which have been two years under cultivation, exhibit a striking superiority over those which have been but one year under the plough; while these, in their turn, surpass the fields in clover or in grain, both in the quantity and size of the fruit: when clover is sown in young orchards, I have been in the habit of digging the earth for about three feet, at the root of each tree: a man will dig round one hundred trees in a day; the trifling loss of grass and labor, will be fully remunerated by the improved vigor of the tree. When the ground can be spared from cropping, four or five furrows on each side of a row, will be found a most eligible mode of promoting the growth of a young orchard.

All fallow crops are most favorable to the growth of orchards, at every early stage of their cultivation—Indian corn, potatoes and vines, are preferable to oats or barley; and these again are more favorable than winter grain: Buck-wheat is among the most beneficial crops for the promotion of the autumnal growth of trees—Clover is by many farmers believed to be injurious to young trees; its tendency to check the growth of trees will be found, I believe, to be in proportion to the air and moisture which its greater or less vigorous growth may keep from the roots; light and heat, appear as necessary to the roots as to the branches of trees—clover, while it occupies the ground, must prevent cultivation; so far I apprehend it will be found pernicious, but probably not in a greater degree than any other luxuriant and deeply rooted species of grass, absorbing the moisture, and exhausting the strength of the soil, which covers the roots of small trees. In the arrangement of an orchard, both convenience and beauty will result from planting each kind in distinct contiguous rows. Some cultivators pay particular attention to continue in the orchard the aspect the tree maintained in the nursery: I have sometimes adopted the practice without much confidence in its efficacy; nor can I think it probable, that trees growing in close rows, not much exposed, in the nursery, can by any habit so limited in its duration, be affected by any permanent contraction or rigidity of the bark, or sap vessels, which are the only effects I have ever heard ascribed to the influence of aspect, on the stems of young trees.

The prevalent winds of our climate, are from the north west: in light soils, their violence will sometimes give an inclination to newly planted trees to the south-east: this may easily be remedied by setting up the trees while young; and when they have attained a large growth, it may be overcome in a great degree, by cutting off the leaning branches, and by freely pruning the leeward side of the tree.

Moss is a plant produced by poverty and neglect; it is very prejudicial to trees, and should be carefully removed: this can be readily done, by rubbing the trees in damp weather with a bone, or the back of a knife; good cultivation will generally prevent the growth of moss—white-washing the stem, not only cleanses the tree of moss, but destroys many kinds of lice very injurious to fruit trees; it is followed by a cleanliness in the bark after it has been dissolved by rain, and promotes the health and vigor of the tree whenever applied.

To preserve Grapes on the vines till winter.—About September, when grapes are nearly ripe, procure some bags made either of crape, muslin or white paper.

Select some of the best bunches, and with a pair of sharp narrow-pointed scissars, cut off all small unripe, rotten, mouldy, or imperfect grapes, especially those eaten by flies or wasps.

Inclose each bunch in a bag, and tie the bag fast with a string, so that no insect can get into it. In the middle of a fine day in October, gather them, with a piece of the shoot to them, and hang them up in a dry warm room.

Dip the end of the shoots in melted rosin or sealing-wax. Examine them frequently, lest they should get mouldy or rotten.

To preserve Apples.—Dry a glazed jar perfectly well, put a few pebbles in the bottom; fill the jar with apples, and cover it with a bit of wood made to fit exactly; and over that, put a little fresh mortar. The pebbles attract the damp of the apples. The mortar draws the air from the jar, and leaves the apples free from its pressure, which, together with the principle of putrefaction which the air contains, are the causes of decay. Apples, kept thus, have been found quite sound, fair, and juicy, in July.

Birds Eye Maple.—Perhaps it is not generally known to our farmers in this section of our country, that this beautiful wood is becoming a very valuable article of Cabinet furniture. The superb cabins of the New York Packet ships are finished with this wood and mahogany, and for richness and elegance are not to be surpassed.

A passenger on board of one of these ships was informed by the captain that it was with difficulty he procured sufficient in the city of New York to finish his cabin, and of a price exceeding that of mahogany.—*Hallowell Gaz.*

ANALYSIS OF SOILS.

In our paper, vol. ii, p. 22, we intimated an intention to give the different modes of analysing soils, recommended by writers on husbandry, and now proceed to fulfil our promise. We would premise, however, that there is a process for this purpose, recommended by Sir Humphrey Davy, in his Lectures on Agricultural Chemistry, which is probably more accurate, but much more complicated than either of the modes which we here place before our readers. Sir Humphrey Davy's method requires a knowledge of chemistry which very few practical farmers have attained, and requires instruments of analysis which not many of our readers would be able or willing to procure. Besides, those gentlemen who have a wish to make use of his processs have, generally, it is to be presumed, his treatise in possession. We therefore give a description of other processes, which are more simple, and we believe sufficiently accurate for all the common purposes of husbandry.

In the field to be examined, take earth a little below the surface, from four separate places, about 1-4 lb. avoirdupois from each. Expose it to the sun, or before the fire, till it is completely dry; and turn it over frequently that it may be well mixed together. From the heap take exactly four ounces, and pass this through a fine sieve, which will allow all the particles of sand and gravel to escape, but which will hold back stones, small fibrous roots, and decayed wood. Weigh the two parts separately, and take a note of each. The stones and other bulky materials are then to be examined apart from the roots and wood. If they are hard and rough to the touch, and scratch glass easily, they are silicious or flinty; if they are, without much difficulty broken to pieces by the fingers, and can be scraped by a knife to powder, they are aluminous or clayey; or if, when put in a wine glass and common vinegar poured upon them, small air bubbles ascend to the top of the liquid, they are calcarious. The finely divided matter, which ran through the sieve, must next undergo the test of experiment. After being weighed, agitate the whole in water, till the earth be taken up from the bottom and mechanically suspended, adding water till this effect be produced. Allow the mass then to settle for two or three minutes; and in that time the sandy particles shall have all sunk to the bottom. Pour off the water, which will then contain the clay in suspension, and the insoluble earth arising from animal and vegetable decomposition. The sand should first be attended to, and if from inspection it be thought either silicious or calcarious in its nature, the requisite tests may be instantly applied.—By this time the mixture will have deposited at the bottom of the vessel the clay, and other earths, with the insoluble animal and vegetable matter. After pouring off the water, dry the sediment, and apply a strong heat by placing it on the bottom of a pot ignited to redness, and the animal and vegetable matter will burn and fly off in aeriform products. The remainder lying in the bottom will be found to consist of clay, magnesia, or lime. To obtain accuracy, another 1-4 lb. of earth should be taken from the same heap, and the whole process gone over a second, a third, or even a fourth time, that the operator may rectify any blunders he had previously committed, and be satisfied as to the results of his experiment. He should provide himself with a pair of fine scales and a set of weights divided at least into ounces and drachms. Although vinegar will detect lime by effervescence, it does not dissolve it so effectually as the nitric or muriatic acid; small quantities of which may be procured from the druggists at no great expense.—*Letters of Agricola.*

Process for analysing soils, given in Memoirs of the New York Board of Agriculture, vol. i, p. 7, of the Appendix.

1st. A quantity of the soil, including gravelly pebbles of the smallest kind, was pulverised in Wedgewood's mortar.

2d. Parcels of two hundred grains each, were separately weighed: three of them, if it was intended to ascertain the proportion of iron; two, if not.

3. One of the parcels was put into a crucible and heated gradually, constantly stiring it with a dry pine stick, until the stick become a little brownish from the heat, on pressing it against the bottom of the crucible.

4th. The above was then carefully poured into the scales and again weighed. What was deficient of the 200 grains, was set down as *water.*

5th. The parcel was then returned into the crucible, and heated to a high red heat. It was frequently stirred with a glass rod, and the heat was continued until the mass presented no shining particles. After allowing it to cool a little, it was returned into the scales again, and what it wanted of its last weight after being dried, was set down for the *animal and vegetable matter.* Part of this is undoubtedly water, but probably it is not more than should always be considered as attached to this part. It may here be added, that there will be no blackness in the appearance of the soil, if it is sufficiently heated.

6th. Let it now be poured in an assay glass, and add half a pint of pure water to it. After repeated stirring for ten minutes, let it stand for about three minutes, to allow the silicious matter to settle. Then pour off all which stands over the silicious part into another glass. Dry this sediment in a high red heat, weigh it, and set it down for the *silex.*

7th. Let the part which was transferred to another glass, stand until it settles, leaving the liquid part clear. Pour off the liquid into another glass, dry this sediment with a high red heat, weigh it, and set it down for the *aluminous part.*

8th. The remaining liquid was then evaporated in a glass evaporating dish. The solid residuum was scraped off, and weighed for the *soluble salts.*

9th. The other parcel of two hundred grains was put into a Florence flask, in which half a gill of equal portions of muriatic acid and water had previously been poured, and which had also been balanced by weights in the scale. After allowing it to stand about three hours, it was ascertained how much less than 200 grains was to be added to the weight, in order to balance the flask. This was considered as the weight of the carbonic acid that had been expelled. Then by the table of component parts, as 45 is to 55, so is this weight to the weight of the base. The *carbonate of lime* in the soil was thus ascertained. The lime, however, must now be subtracted from the silex, and the weight of the carbonic acid must be deducted from the animal and vegetable matter; since the heat that burnt out the animal and vegetable matter, also expelled the carbonic acid, and left the lime with the silex.

We are aware that part of the quick-lime may remain with the soluble salts, and part of the carbonic acid may still remain with its base and the silex. The error, however, will be of no consequence in agriculture.*

Particular attention was paid to the time required for the alumine to settle. It was observed, that in soils which are adhesive, and retain water a length of time, the time necessary for the alumine to settle, was in the same proportion. It was also found to be a much better criterion for determining the measure of this quality, than the actual proportion of alumine.

Though the above method of analysis is not sufficiently minute for the speculative chemist, yet it does not differ materially even from the most accurate method. Similar portions of soil, taken from the river alluvion of William Sill, Esq. of Bethlehem, were analysed according to that of Sir Humphrey Davy, given in Henry's Chemistry. The results were as follow:

By the preceding formula.

Silex per cent.	64.5
Alumine,	24.0
Carbonate of lime,	3.5
Soluble salts,	1.0
Animal and vegetable matter,	4.5
Water,	2.5
	100.0

By Davy's Method.

Silex,	60.00
Alumine,	22.50
Carbonate of lime,	3.25
Oxyd of iron,	2.75
Muriate of lime,	.50
Sulphate of magnesia,	.50
Animal and vegetable matter,	4.50
Water,	2.50
Loss,	3.50
	100.00

AMOS EATON,
T. ROMEYN BECK.

The following mode of analysing soils is from a "Treatise on Agriculture," first published in the Albany Argus.

"1st. Take a small quantity of earth from different parts of the field, the soil of which you wish to ascertain, mix them well together and weigh them; put them in an oven, heated for baking bread, and after they are dried, weigh them again, the difference, will show the *absorbent power of the earth.* When the loss of weight in 400 grains, amounts to 50, this power is great, and indicates the presence of much animal or vegetable matter; but when it does not exceed twenty, the absorbent power is small, and the vegetable matter deficient.†

2d. Put the dried mass into a vase with one fourth of its own weight of clear water; mix them well together; pour off the dirty water into a second vase and pour on as much clean

* It may, perhaps, be satisfactory to state, that the above formula was mentioned to Professor M'Neven, of New York, who is now engaged in a very minute analysis of soils in that vicinity; and that he gave it as his opinion, that the above method of analysis was the best adapted to the purpose for which the investigations were made.

† See Davy's elements.

water as before; stir the contents, and continue this process until the water poured off, is as clear as that poured on the earth. What remains in the first employed vase is sand *silicious or calcarious.*

3d. The dirty water, collected in the second vase, will form a deposit, which (after pouring off the water) must be dried, weighed and *calcined.* On weighing it *after* this process, the quantity lost, will shew the portion of *animal* and *vegetable mould contained in the soil:* and,

4th. This calcined matter must then be carefully pulverised and weighed, as also the first deposit of sand, but without mixing them. To these apply, separately, sulphuric acid, and what they respectively loose in weight, in the portion of *calcarious* or *aluminous earths* contained in them. These last may be separated from the mass of soap lye, which dissolves them.*

Here is the light we wanted. In knowing the disease, we find the cure. Clay and sand qualify each other; either of these will correct an excess of lime, and magnesian earth, when saturated with *carbonic acid*, becomes fertile."

ON THE CURCULIO.—By Dr. Tilton.

Curculio, a genus of insects belonging to the *Coleoptera*, or *Beetle* order. The species are said to be very numerous. The immense damage done, by an insect of this tribe, to the fruits of this country, of which there is no similar account in Europe, has given rise to a conjecture with some naturalists that we have a peculiar and very destructive species in America.

The manner in which this insect injures and destroys our fruits, is, by its mode of propagation. Early in the spring, about the time when the fruit trees are in blossom, the *Curculiones* ascend in swarms from the earth, crawl up the trees, and as the several fruits advance, they puncture the rind or skin, with their pointed rostra, and deposit their embryos in the wounds thus inflicted. The maggot thus bedded in the fruit, preys upon its pulp and juices, until in most instances, the fruit perishes, falls to the ground, and the insect escaping from so unsafe a residence, makes a sure retreat into the earth: where, like other beetles, it remains in the form of a grub or worm, during the winter, ready to be metamorphosed into a bug or beetle, as the spring advances. Thus every tree furnishes its own enemy; for although these bugs have manifestly the capacity of flying, they appear very reluctant in the use of their wings; and perhaps never employ them but when necessity compels them to migrate. It is a fact, that two trees of the same kind may stand in the nearest possible neighborhood, not to touch each other, the one have its fruit destroyed by the Curculio, and the other be uninjured, merely from contingent circumstances, which prevent the insects from crawling up the one while they are uninterrupted from climbing the other.

[Why not tie a rope dipt in tar round the tree, about the time when these insects begin to appear? The tar can be renewed. We strongly recommend the treatise on fruit trees, by Mr. Cox, of Burlington, New-Jersey.—T. C.]

The Curculio delights most in the smooth-stone fruits, such as nectarines, plums, apricots, &c. when they abound on a farm; they nevertheless attack the rough-skinned peach, the apple, pear and quince. The instinctive sagacity of these creatures directs them especially to the fruits most adapted to their purposes. The stone fruits more certainly perish by the wounds made by these insects, so as to fall in due time to the ground, and afford an opportunity to the young maggot to hide itself in the earth. Although multitudes of seed fruits fall, yet many recover from their wounds, which heal up with deeply indented scars. This probably disconcerts the Curculio, in its intended course to the earth. Be this as it may, certain it is, that pears are less liable to fall, and are less injured by this insect than apples. Nectarines, plums, &c. in most districts of our country, where the Curculio has gained an establishment, are utterly destroyed, unless special means are employed for their preservation. Cherries escape better, on account of their rapid progress to maturity, and their abundant crops: the Curculio can only puncture a small part of them, during the short time they hang upon the tree. These destructive insects continue their depredations from the first of May until autumn. Our fruits, collectively estimated, must thereby be depreciated more than half their value.

It is supposed the Curculio is not only injurious above ground, but also in its retreat, below the surface of the earth, by preying on the roots of our fruit trees. We know that beetles have, in some instances, abounded in such a manner as to endanger whole forests. Our fruit trees often die from manifest injuries done to the roots by insects, and by no insect more probably than the Curculio. In districts where this insect abounds, cherry-trees and apple-trees which disconcert it most above, appear to be the special objects of its vengeance below the surface of the earth.

We are unacquainted with any tribe of insects able to destroy the Curculio. All the domestic animals, however, if well directed, contribute to this purpose. Hogs, in a special manner, are qualified for the work of extermination. This voracious animal, if suffered to go at large in orchards, and among fruit trees, devours all the fruit that falls, and among others the curculiones in the maggot state, which may be contained in them. Being thus generally destroyed in the embryo state, there will be few or no bugs to ascend from the earth in the spring, to injure the fruit.

The ordinary fowls of a farm yard are great devourers of beetles. Poultry in general are regarded as carnivorous in summer, and therefore cooped sometime before they are eaten. Every body knows with what avidity ducks seize on the tumble-bug, (*Scarabœus carnifex.*) and it is probable the Curculio is regarded by all the fowls as an equally delicious morsel. Therefore it is, that the smooth stone fruits particularly, succeed much better in lanes and yards, where the poultry run without restraint, than in gardens and other enclosures, where the fowls are excluded.

Even horned cattle, and all sorts of stock, may be made to contribute to the preservation of our valuable fruits. By running among the trees, they not only trample to death multitudes of these insects; but by hardening the ground, as in lanes, it becomes very unfit to receive or admit such tender maggots as crawl from the fallen fruits. Besides, the Curculio is very timid, and when frightened by the cattle rubbing against the tree, or otherwise, their manner is to fold themselves up in a little ball, and fall to the ground; where they may be trampled and devoured by the stock, poultry, &c. Col. T. Forrest, of Germantown, having a fine plum tree near his pump, tied a rope from the tree to his pump handle, so that the tree was gently agitated every time there was occasion to pump water. The consequence was, that the fruit on this tree was preserved in the greatest perfection.

All the terebinthinate substances, with camphor and some others, are said to be very offensive to insects generally. Upon this principle, General T. Robinson, of Naaman's Creek, suspends annually little bits of board, about the size of a case knife, dipped in tar, on each of his plum trees. From three to five of these strips are deemed enough, according to the size of the tree. The General commences his operations about the time or soon after the trees are in full bloom, and renews the application of the tar frequently, while the fruit hangs on the tree. To this expedient he attributes his never failing success. Other gentlemen alledge, that common turpentine would be still better; being equally pungent, and more permanent in its effects. Some have sown offensive articles, such as buckwheat, celery, &c. at the root of the tree, and have thought that great advantages followed.

Ablaqueation, or digging round the trees, and making bare their roots in winter, is an old expedient of gardeners for killing insects, and may answer well enough for a solitary tree, a year or two: but the Curculio will soon recover from a disturbance of this sort, and stock the tree again.

There is no surer protection against the Curculio than a pavement. This, however, is only applicable to a few trees. It may serve in town; but will not answer in the country. Flat stones may however be placed round the tree, and where lime is at hand, they may be cemented.

Many other expedients, such as smoking, brushing, watering, &c. may be successfully employed, for the protection of a favorite tree or two; but it is manifest, from the preceding history, that a right disposition of stock, especially hogs, among the fruit trees, can only be relied upon by a farmer, with orchards of considerable extent. And that the stock, poultry, &c. may perform the task assigned them, it is evident that a proper disposition of fruit trees is essentially necessary.

As the smooth stone fruits are the grand nurseries of the Curculio, special care should be taken to have these effectually protected. Unless this can be done, a farmer should not suffer them to grow on his plantation. He will derive no benefit from them; and they will furnish a destructive vermin that will ruin his other fruits. Cherry-trees, nectarines, plums, apricots, &c. should therefore be planted in *lanes* and *hard beaten yards*, or paved yards, the common highways of all the stock of the farm, and not beyond the range of the ordinary domestic fowls. Orchards of apple trees, pear trees, peach trees, &c. should all be in one enclosure. The pear trees and peach trees may occupy

* This method of analysing soils, is that described by Mr. Bose, a member of the institute of France, &c. and recommended to French agriculturists.

corners of the whole design, so as occasionally to be fenced off. In large orchards, care should be taken that the stock of hogs is sufficient to eat up all the early fruit which falls, from May until August. This precaution will be more especially necessary in large peach orchards; for, otherwise, when the hogs become cloyed with the pulp of the peach, they will let it fall out of their mouths, and content themselves with the kernel, which they like the better: and thus the Curculio, escaping from their jaws, may hide under ground, until next spring. Solitary trees of one fruit or another, remote from the orchard, should be regarded as nurseries of the Curculio, and ought to be cut down or removed to the common enclosure. A young orchard should not be planted in the place of, or adjacent to, an old one, that it may not be immediately infested with the Curculio.

It is also apparent, from what has been said, that great advantages might result from an association or combination of the whole neighborhoods against this common enemy. Although an intelligent farmer may accomplish much, by due attention, within his own territory, the total extermination of the Curculio can hardly be expected, but by the concurrent efforts of whole districts.

NEW ENGLAND FARMER.

SATURDAY, SEPTEMBER 27, 1823.

☞ Subscribers to the N. E. Farmer are requested not to pay any money to Travelling Agents, on account of the paper, as Agents of this description are not authorised to receive money on our account. Sept. 27.

☞ Subscribers who have not paid for the *first* vol. of the Farmer, are requested to forward us the amount due immediately; and those who wish to save 50 cents must pay for the *second* vol. by the 1st of October.

REMARKS

On the Frothing or Foaming of Horses at the Mouth, in the fall of the year, called "*Salivation of Horses*," "*Salivary Defluxions of Horses*," or "*Slavers of Horses*."

Every farmer is acquainted with this disorder, and therefore a description of its symptoms is not necessary. Of its causes and cure very little is known, perhaps nothing that can be relied on. Some have thought it was caused by the webs of spiders, some that it was a poisonous plant called *Lobelia*, or Indian tobacco, and a writer for the American Farmer, (Mr. Abel Seymour, whose communication we republished, p. 19, vol. ii,) thinks it is produced by "streaks of blue mould on the grass." Mr. Lovett Peters (whose communication on the subject is given p. 58) is of opinion that "the slavers of horses is caused by their eating a kind of grass of second growth, making its appearance in the fore part of July, much resembling oats, which come up in the fall after the crop has been taken off the ground, but has rather more of a brownish cast, and retains its green very late in the fall."

The acknowledged importance of the subject has induced us to give it such attention as our leisure and opportunities would admit of, and the result of our inquiry is an opinion that Mr. Peters is correct. In the 2d vol. of Memoirs of the Philadelphia Agricultural Society, (page 350 to page 358) are published two communications "On the Salivary Defluxions in Horses, written by the request of Mr. William Young, and by him forwarded to the Society." Mr. Abraham Perlee was the author of one of these communications, and Mr. William Baldwin of the other. Mr. Perlee attributes the disorder to a plant called "SPOTTED SPURGE, *Euphorbia Maculata* of Linneus." He says "the frequent occurrence of a profuse discharge of saliva from horses, and its rapid production of great debility and emaciation in that useful animal, had not only excited the attention and surprise of many of the faamers, but had also given rise to many conjectures as to the cause of it. Many opinions were founded on no substantial data, but originating only from conjecture; by many it was imputed to a peculiar quality inherent in the second growth of clover,—its generally appearing first when horses were put to pasture on the second crop, and being almost exclusively produced by pasturing in clover fields, were considered as corroborating evidences of the correctness of the hypothesis; but its not having occurred for many years after clover had been extensively cultivated, and not occurring at all in many places, where horses are pastured almost altogether on clover, sufficiently proved that opinion to be erroneous. It was also imputed to the effects of gypsum or plaister so frequently used to promote the growth of clover, but the occurrence of it on many farms where no plaister had been used, as well as its not occurring on many where it had been used very copiously, proved this opinion equally incorrect with the former.

"My friend, Dr. William Baldwin, of Wilmington, informed me that a member of the Linnean Society of Philadelphia had supposed, that the ptyalism, (salivation) was caused by a species of Euphorbia, [spurge.] He also politely favored me with a specimen of the species to which it was imputed, and gave me some information on the Euphorbia Americana in general, which extensive knowledge in Botany enabled him to do. For the purpose of ascertaining the fact, I procured a small quantity of the Euphorbia maculata, and gave it to my horse enveloped in a small quantity of clover, carefully gathering stem by stem, and perfectly free from all other vegetable or any extraneous matter whatever. A preternatural discharge of saliva took place in less than half an hour. This experiment was frequently repeated, and invariably with the same result. To prove that clover did not contribute towards it, in some cases other grass was used as an envelope with the same effect. And when the horse was perfectly free from ptyalism, a considerable quantity of clover carefully gathered without the Euphorbia was given to him, and no such effect was produced.

"These experiments I considered sufficient to prove that the *Euphorbia maculata* could produce salivation. And I am induced to think, for reasons that I shall hereafter mention, that it is the general, if not the only cause of it." [To be continued.]

Lime believed to be an antidote against the Worm or Grub, which destroys potatoes.

We published in vol. ii, page 54, some remarks on a "large white worm with a red head," which attacks and devours potatoes in the hill, and requested information from our agricultural friends relative to the insect, and the means of guarding against its ravages. Since the publication of that article we have learnt that Mr. Young, in Annals of Agriculture, has the following passage:

"I planted an acre with kidney potatoes, and two days after ordered two bushels of fresh lime to be thrown over the surface of the ground, leaving two rows unlimed, to see if the experiment would have any visible effect on the crop.

"The latter end of August following, I was surprised to find the rows which were left unlimed very much grub eaten; and the remainder a fine, clear and perfectly sound crop. I planted four acres in 1782, dressing the whole with lime, and my crop was quite clear from the grub; fourteen acres in 1783 with the same success, when a land, not top dressed with lime, suffered much, almost every plant being damaged."

It will be perceived that the amount of the top dressing in the first experiment mentioned was only about two bushels of lime to an acre, and if quick lime is an antidote against the grub that devours potatoes, it is probable that it may be equally effectual against the cut worm, wire worm, and other insects which so often destroy the hopes of the husbandman.

AGRICULTURAL EXHIBITIONS.

☞ The Cattle Show, Exhibition of Manufactures, Ploughing Match, and sale of Animals and Manufactures, will be at Brighton, on the 15th and 16th Oct. No labor nor expense has been spared to increase the interest and extend the usefulness of this Farmers' and Mechanics' Festival. Much is anticipated, but we believe expectation will not transcend reality. At 9 o'clock, A. M. of Wednesday the 15th, the Members of the Massachusetts Society for promoting Agriculture will meet in their Hall for the admission of members, &c. At half past 9, a procession will be formed by the Marshals, and proceed to the Meeting House, where Prayers will be offered by Rev. Dr. Foster, and the President will announce the arrangements, names of the several Committees on Premiums, &c.

The *Worcester Cattle Show*, &c. as we have already stated, will take place on the 8th of next month. We would now add that the Ploughing Match will commence at 9 o'clock, A. M. and immediately afterwards a procession will be formed and proceed to the South Meeting House, where Prayers will be offered by the Chaplain of the day, and an Address will be delivered by a member of the Board of Trustees. The arrangements of this exhibition, as published in the Worcester papers, promise all that can be expected or desired to amuse, interest, gratify and improve.

The *Berkshire Agricultural Society* will hold their Cattle Show and Fair on the 1st and 2d of October, at Pittsfield. An Address will be delivered by a Member of the Society.

The *Middlesex Cattle Show and Exhibition of Manufactures* will be held at Concord on Thursday next. Prayers will be offered by the Chaplain, and an Address delivered by Josiah Adams, Esq. of Framingham.

Plymouth County.—The Exhibition will be at South Bridgewater, the 7th of October. Address by Hon. Kilborn Whitman.

The annual Show and Fair of the *Hampshire, Franklin and Hampden Agricultural Society*, will be on the 22d and 23d of October, at Northampton. We understand an Address will be delivered by I. C. Bates, Esq.

Cheshire Agricultural Society will meet at Westmoreland, N. H. on the 1st day of October. Address by Mr. John Lancaster, of Acworth.

COMMUNICATIONS.

MR. EDITOR—If you or some of your correspondents would give some information, through the Farmer, relative to the best manner of cultivating the Currant bush, a favor would be conferred on one, and probably on several of your subscribers.

MR. EDITOR—If you have not published it in your paper, I will thank you to publish an abstract of a law of this State, passed 12th June, 1818, against "Trespasses in divers cases," in stealing fruit, &c. from farms. A SUBSCRIBER.

By the Act alluded to it is enacted, Sect. 1. That if any person shall enter upon any grass land, orchard or garden, without permission of the owner thereof, with intent to cut, destroy, take, or carry away, any grass, hay, fruit, or vegetables, with the intent to injure or defraud such owner; each person so offending shall forfeit and pay, for every such offence, a sum not less than two dollars nor more than ten dollars, to the use of the Commonwealth, to be recovered on complaint before any Justice of the Peace of the county in which the offence shall be committed; and the persons so offending shall also be liable in damages to the party injured.

Sect. 2. That if any person, having entered upon

any grass land, orchard or garden, shall take therefrom, without permission of the owner thereof, and with the intent to injure or defraud such owner, any grass, hay, fruit, vegetables, or shrub, cultivated therein for ornament or use; such person so offending, shall forfeit and pay for each offence, to the use of the Commonwealth, not less than five, nor more than fifty dollars, to be recovered by indictment, or information, before the Circuit Court of Common Pleas, in the County where such offence shall be committed, or the Municipal Court of the town of Boston, if such offence be committed in the county of Suffolk; and the person so offending shall be liable to the party injured, in a sum equal to three times the value of such grass, hay, fruit, vegetable or shrub, to be recovered by action on the case in any court of competent jurisdiction.

Sect. 3. That any person, who having entered upon any grass land, field or orchard, shall, without permission of the owner thereof, and with intent to injure him, break, bruise, cut, mutilate, injure, or destroy, any fruit tree, tree for ornament or shade, or shrub cultivated thereon, for ornament or use, and which shall be standing or growing thereon, such person so offending shall pay to the use of the Commonwealth, a sum not less than ten dollars, nor more than one hundred dollars, to be recovered by indictment or information, in manner as is provided in the second section of this act.

Sect. 4. That if any person shall commit any of the trespasses mentioned in this act, on the Lord's day, or in the night time, that is to say, between sun setting and sun rising, he shall be liable to double the penalties and forfeitures, the same to be prosecuted for, and recovered, in manner as before provided; and all prosecutions for breaches of this act shall be commenced within one year from the time the offence shall be committed, or the penalties or forfeitures shall have accrued, and not afterwards. *Passed June* 12, 1818.

FOREIGN.

Latest from England.—London papers to the 21st and Liverpool to the 22d have been received by late arrivals. By these it should seem that Ballasteros has deserted the constitutional cause, and capitulated with Molitor. The troops of the former, however, are said to remain firm. They amount to 7000, and are commanded by Zayas and Riego. The French are said to have been attacked and defeated in an obstinate battle near Manresa, which lasted two days. Their loss is stated to be 3000 prisoners, and a great number killed and wounded. Corunna still remained in the hands of the Constitutionalists. It was reported that the Duke of Wellington and Lord F. Somerset are about to proceed on a mission to Cadiz. On the whole it appears that nothing decisive has been effected, and the Spaniards have every thing to hope for from a protracted warfare.

DOMESTIC.

Samuel L. Southard, of New Jersey, has been appointed, by the President, to be Secretary of the Navy of the United States, vice S. Thompson, resigned.—Mr. Southard has arrived in Washington, and entered on the performance of the duties of his office, which have been temporarily discharged by Com. Rodgers.

Indian Corn.—Mr. Daniel Brown, of Springfield, Vt. has gathered as the product of a single kernel, *twelve* ears of corn, the average length of which is nearly eight and an half inches.—*Bellows Falls paper.*

Fire.—Two barns owned by Ebenezer Locke, Esq. in the N. E. part of Rockingham, Vt. were set on fire by lightning on the night of the 18th inst. and entirely consumed. Several hundred bushels of grain, much hay, and other property was also destroyed.—*ibid.*

Loss by Fire in Maine.—It appears by a statement made by committees appointed by the towns of Wiscasset and Alna, in Maine, that the value of property destroyed, consisting of houses, barns, and other buildings, stock, &c. in Wiscasset, was $50,650; and in Alna $22,000; besides the total destruction of an excellent growth of wood, for which the place depended for future supplies of fuel, ship timber, &c. which taken into the estimate it is thought will swell the whole amount to more than $200,000.

Kine Pock Inoculation.—Measures have been taken to inoculate, by subscription, the inhabitants of New Bedford and Fairhaven, and about eight hundred have already been vaccinated.

The Rutland (Vt.) Herald says that "the widow Mehitable Hoyt, spun and reeled, on the 1st inst. for Philip Green, of Clarendon, 203 knots of good woollen yarn in one day."

Singular Rencontre.—On Sunday, the 20th of July last, as a Miss Sophronia Williams was returning home from church in the afternoon in the township of Eaton, a bear was discovered following her, of which she was not aware until alarmed by the cries of Mr. Ansell Mitchell, Mr. A. Williams, Mr. Baglay and others. Miss Williams ran and succeeded in getting to her father's house without any injury, except being very much frightened. The above mentioned persons pursued the bear with one gun and one axe, and having come up with him, fired at him, and by the blood that followed their shot, imagined they had inflicted a mortal wound, but the bear making off they continued their pursuit; their gun had lost its lock, and was therefore useless. Mr. Mitchell seized the axe out of another persons hand, and being swifter than the rest pursued him alone. He was advised not to attack him (being a he bear) until the rest came up, but Mr. M. not fearing any danger, was soon out of their sight, and coming up with him in the act of going over a log struck him on the rump with the head of the axe. The bear not receiving any particular injury threw himself over the log. Mr. M. followed and struck him again on the head with the axe head which brought him down, but when Mr. M. was about to repeat the blow, he rose and seized him near the left shoulder with one paw, seized his hand with his mouth, began biting and tearing his arm, and throwing himself on his back, attempted to pull Mr. M. down upon him, but he seeing his object, jumped with all his force past the bear's head, and as he prepared for another gripe, twitched his arm out of his mouth which tore off part of the flesh; he then jumped over the log, in the act of doing which the bear made a blow at him with his paw which only tore his trowsers. The bear then retreated, and Mr. M. awaited the arrival of the rest of the party, when they concluded to pursue him no farther till next morning, as it was then nearly dark. The next morning a party went in search of, and succeeded in killing him, after having put seven shots in his body. He measured nearly six feet in length, and full nine inches across his head from ear to ear. We are happy to state that Mr. Mitchell is in a fair way to recover.

Stanstead Br. Col.

NEW ENGLAND MUSEUM,

76, *COURT STREET, BOSTON,*

CONTAINING much more numerous Collections and greater variety of entertainments than any other Establishment in America, continues steadily to increase, and is open for the reception of visiters

EVERY DAY AND EVENING.

It will be constantly in the best possible condition, and every exertion made to render the visits of its patrons agreeable.

This Establishment now contains FIVE former Museums united in ONE, together with very great and numerous additions (the whole receipts being faithfully laid out to increase it.)

JUST ADDED,

The celebrated Race Horse Eclipse,

A beautiful Cosmoramic View of London,

A large and beautiful live Rattlesnake,

The Arabian Bottle, made of the stomach of a Camel—holds about a barrel—used to carry water across the desart.

The Invalid's Chair—very ingenious—invented by Professor Peck,

A very large and elegant Sword Fish, upwards of 14 feet long, with a sword 4 1-2 feet long.

There is also now residing in the Museum, Mr. JOSEPH M. STEVENS, the most *remarkable Dwarf* ever witnessed in the U. States. He is handsome, cheerful, and gentlemanly in his deportment; in his 20th year; 37 1-2 inches high, and weighs 34 lbs.

☞ The Museum is well lighted, and a Band of Music performs every evening. Admittance 25 cents.

Newly Invented Threshing Machine.—Mr. Josiah Jaquith, of Brunswick, Maine, has invented a Threshing Machine which is thought by good judges to be in some respects superior to any hitherto submitted to the public. The grain, with this machine, is threshed by a number of *flails*, which are put in motion by turning a crank, to which may be applied horse power, or the power of wind or water, or it may be turned by hand, as found most convenient. Among its advantages may be numbered that of its separating the grain from the straw *very perfectly*, and preserving the straw entire. It can likewise be afforded much *cheaper* than machines heretofore used for a similar purpose. This machine may be seen, and its operations inspected at the Agricultural Warehouse of Mr. J. R. Newell, No. 20, Merchants' Row, Boston. Farmers and others who feel an interest in the success of Agriculture, are invited to call and examine this implement, which we are confident will realize their most sanguine expectations.

Mr. John Bicknall, of Buckfield, Maine, has invented a Grist Mill, adapted to hand or horse power; by which all kinds of grain may be ground by families at home, in such a manner, and at such times as may suit their own convenience. It is calculated to grind, sift or bolt, if desired, at one operation.

PRICES OF COUNTRY PRODUCE, &c.

[Revised and corrected every Friday.]

		FROM	TO
		D. C.	D. C.
ASHES, pot, 1st sort,	ton.	136 00	137 50
pearl do.		135 00	
BEANS, white,	bush	90	1 00
BEEF, mess, 200 lbs.	bbl.	8 50	9 00
cargo, No 1,		7 50	7 75
" No 2,		6 50	7 00
BUTTER, inspect. 1st qual. new	lb.	12	14
" 2d qual.		9	10
small kegs, family,		12	15
CHEESE, new milk		7	9
FLAX		8	9
FLAX SEED	bush	65	70
FLOUR, Baltimore, Howard St.	bbl.	7 75	
Genessee, new,		8 00	
Rye, best		3 75	4 00
GRAIN, Rye	bush	60	63
Corn		55	60
Barley		65	70
Oats		35	00
HOGS' LARD, 1st sort	lb.	11	12
HOPS, No 1, Inspection of 1822		12	14
LIME,	cask	1 00	1 12
OIL, Linseed, American	gal.	60	65
PLAISTER PARIS	ton.	2 75	3 00
PORK, Navy Mess	bbl.	12 00	
Bone Middlings		14 50	15 00
Cargo, No 1,		12 00	
Cargo, No 2,			
SEEDS, Herd's Grass, 1822,	bush	2 00	
Clover	lb.	7	8
WOOL, Merino, full blood, washed		55	65
do do unwashed		40	50
do 3-4 washed		45	55
do 1-2 do		40	45
Native do		35	37
Pulled, Lamb's, 1st sort		55	60
do Spinning, 1st sort		45	50

PROVISION MARKET.

BEEF, best pieces	lb.	8	10
PORK, fresh		6	9
VEAL,		4	10
MUTTON and LAMB,		3	10
POULTRY,		12	14
BUTTER, keg & tub, family,		14	16
lump, best		18	20
EGGS,	doz.	13	15
MEAL, Rye,	bush	70	75
Indian,		65	70
POTATOES, new,		30	42
CIDER, liquor, new	bbl.	1 50	2 00
HAY, best,	ton.	16 00	20 00

JOB PRINTING

At short notice and fair prices, at the Farmer Office.

ON POOR CHEESE.

Hence Woburn dairy-wives run mad for cream,
And leave their milk with nothing but its name;
Its name derision and reproach pursue,
And strangers tell of "three times skimm'd sky-blue."
To cheese converted what can be its boast?
What but the common virtues of a post!
If drought o'ertake it faster than the knife,
Most fair it bids for stubborn length of life,
And like the oaken shelf whereon 'tis laid,
Mocks the weak efforts of the bending blade;
Or in the hog-trough rests in perfect spite,
Too big to swallow, and too hard to bite.
Inglorious victory! ye Cheshire meads,
Or Severns flow'ry dales, where plenty treads,
Was *your* rich milk to suffer wrongs like *these?*
Farewell your pride! farewell renowned cheese!
The skimmer dread, whose ravages alone
Thus turns the mead's sweet nectar into stone.

BLOOMFIELD.

From the Bath Society Papers.

The Popham family were lords of Burnham, in Somersetshire, Eng. in the last century, and we have a tradition amongst us, that an ancestor of this family, when a young university blood, in company with two jovial companions, made too free with a gentleman's purse on the road. Soon after Popham repented, and his companions thought nothing less than a discovery would follow, which in order to prevent they led him into a wood, fastened his hands behind him, fixed one end of a halter round his neck, the other end to a limb of a tree, and in this situation left him seated upon his horse. Popham was under dreadful apprehensions of his approaching fate, and so much the more as the grass grew short on which the horse had for a time quietly fed; but he now began to stretch the rope by extending his circuit, and Popham, who had been humoring him with a jockey whistle, began to cry out in great agony of soul, *Ho! Ball! Ho Ball!* but at the very instant he was about to swing off, he was relieved by one of his companions, who had divided from the other and had returned back for that purpose. It happened that in a series of years Popham became a judge, before whom his companion who had saved his life was convicted for a capital offence, and being asked why judgment of death should not pass, he mimicked the judge's former tone of voice, and cried out *Ho! Ball! Ho Ball!* The judge, who now recollected his face, told the Court that the prisoner appeared to be insane, and that he would respite sentence till next assizes, before which he found means to get the culprit pardoned and provided for.

Advantages of an Empty Purse.—People may talk as they please about independence. Your only real independent man is he of the empty purse. What is the rise or fall of stocks to him? What cares he for commercial failures? What for high or low prices? What for taxation or national debt? What for commotions, revolutions, the decline and fall of empires? Nothing. He smiles at the robber by night and the tax gatherer by day, and regards the exciseman and pickpocket with equal indifference. He is your free philosopher, worthy of the eye of Jove—one, who stands

"Unhurt amid the war of elements,
The wreck of matter and the crush of worlds."

The following curious passage occurs in Capt Franklin's Journey to the Polar Sea. The Quarterly Reviewer says that he "recollects a case stated by Humboldt, in South America, perfectly well authenticated, and almost precisely similar to it."

"A young Chipewyan, had separated from the rest of his band for the purpose of trenching beaver, when his wife, who was his sole companion, and in her first pregnancy, was seized with pains of labor. She died on the third day after she had given birth to a boy. The husband was inconsolable, and vowed in his anguish never to take another woman to wife, but his grief was soon in some degree absorbed in anxiety for the fate of his infant son. To preserve its life he descended to the office of nurse, so degrading in the eyes of a Chipewyan, as partaking of the duties of a woman. He swaddled it in soft moss, fed it with broth from the flesh of the deer, and to still its cries applied it to his breast, praying earnestly to the great Master of life to assist his endeavours. The force of the powerful passion by which he was actuated, produced the same effect in his case, as it has done in some others which are recorded, a flow of milk actually took place from his breast. He succeeded in rearing his child, taught him to be a hunter, and when he attained manhood, chose him a wife from the tribe. The old man kept his vow in never taking a second wife himself, but he delighted in tending his son's children, and when his daughter-in-law used to interfere, saying that it was not the occupation of a man, he was wont to reply, that he had promised to the great Master of life, if his child was spared never to be proud, like the other Indians. He used to mention too, as a certain proof of the approbation of Providence, that although he was always obliged to carry his child on his back while hunting, yet that it never roused a moose by its cries, being always particularly still at those times. Our informant added that he had often seen this Indian in his old age, and that his left breast, even then, retained the unusual size it had acquired in his occupation of nurse."

From a Manchester (Eng.) paper of May 6.

On Thursday last, Mr. Francis Wooton, the person who has contracted to remove the ball and cross of St. Mary's spire, by means of ladders only, arrived in this town, accompanied by his son and an assistant, in order to take advantage of the first favorable weather to carry his wonderful project into effect.

After making the necessary preparations he commenced the erection of his chain of ladders against the spire on Friday morning, and before the close of that day he had succeeded in reaching within a few yards of the ball, in a manner the expedition and ingenuity of which were in the highest degree admirable. The method by which he contrived to erect ladder upon ladder, in a way sufficiently secure, was as follows:—After having placed one of the longest against the base of the spire, he fastened the top of it to the masonry by new clamps; then by means of a block and pulleys, attached to the upper part of this ladder, his assistants below were enabled to raise another one, whilst Mr. Wooton followed and guided it in the proper direction: thus making it appear to the spectators below as if he were pushing the ladder before him, with the mere force of his arms. When this ladder was elevated to the requisite height, he proceeded, by means of cords, to secure the bottom part of it firmly to the top part of the lower one, and then ascended the one last raised, and fastened the end of it also by means of clamps—thus proceeded, by alternately removing the pulleys, a ladder higher each time. As he ascended, and his situation became consequently more perilous, the anxiety evinced by the crowds of spectators collected below became intense, being careful to avoid making any noise for fear the sound should distract his attention, and endanger him to be precipitated headlong.

On Saturday morning, we arrived in the church-yard as Mr. W. was raising the last ladder, by far the most perilous of the whole, and had an opportunity of surveying him through a powerful telescope, and to see the composure and confidence he proceeded with his work, when the least slip would have hurled him to destruction, was truly astonishing. When he had fastened the bottom of this ladder, which was placed against the ball in a nearly perpendicular direction, he had to ascend it though unfastened at the top; and in this dangerous situation he contrived to throw a rope twice round the spire, and succeeded at last in making it perfectly secure; after which he mounted to the top, stood on the very pinnacle of the spire, and pulling off his hat, gave three cheers, which were heartily echoed from the crowds below, who had for a long time been looking up with breathless astonishment and fear. On his descent, he was again hailed by the cheers and congratulations of the bystanders. During the remainder of that day he was not able to proceed much farther in his undertaking, in consequence of the wind being too high to render it practicable. By means of a hook fastened to his belt, he was enabled to attach himself to the ladder when at work, but this not being visible to the spectators, his situation at times seemed hazardous in the extreme, when both his hands were engaged, and there appeared no other stay between him and destruction than the uncertain footing of the ladder.

Of the undertaker and his project we can scarcely speak in terms too high; and we believe it equals, if not exceeds, any thing in the records of human daring and enterprise. To the time of our paper going to press, the weather had continued too unfavorable to render further proceeding in the undertaking, up to that period, practicable.

Counsellor Lamb, an old man, when the present Lord Erskine was in the heighth of reputation, was a man of timid manners, and nervous disposition, and usually prefaced his pleadings with an apology to that effect, and on one occasion, when opposed in some cause to Erskine, he happened to remark that "he felt himself growing more and more timid as he grew older." "No wonder," replied the witty but relentless barrister, "every one knows the older a *lamb* grows the more *sheepish* he becomes."

TERMS OF THE FARMER.

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